

ABSTRACT

The present invention relates to a small four-stroke gasoline engine with oil mist lubrication. The lubrication oil way of the engine includes a crankshaft chamber B, a camshaft chamber C, an upper rocker arm chamber D and a condensation chamber E. The camshaft chamber C communicates with the upper rocker arm chamber D via a tappet cavity 13. The upper rocker arm chamber D communicates with the condensation chamber E. An oil mist chamber A is surrounded by an upper case body 3 and a lower case body 4 at the side of the crankshaft chamber B, the bottom of the oil mist chamber A communicates with the crankshaft chamber B. An oil splash impeller 2 is fixed on a crankshaft, which extends into the oil mist chamber A. An oil way 12 is provided on the upper case body 3 between the oil mist chamber A and the camshaft chamber C. An oil return way 15 is provided on a cylinder head assembly 5. An oil return way 14 is provided on the upper case body 3. An upper interface of the oil return way 15 communicates with the upper rocker arm chamber D, a lower interface of the oil return way 15 communicates with the oil return way 14, and a lower interface of the oil return way 14 communicates with the crankshaft chamber B. The conventional lubricating mode is changed by the structure of the invention, which makes use of the pressure change during the reciprocating movement of a piston assembly 8 to attain the circulation of oil. The structure is simple, reliable in operation and has small consumption in power.